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ABSTRACT

Student skills and employment opportunities for diplomates of Nedlands College of Advanced Education, Western Australia, are surveyed. For diplomates in the fields of teaching, library media, and recreation, an oversupply exists in the labor market. It is suggested that this oversupply will continue for at least two years in the case of library and recreation diplomates, and for longer periods in the case of secondary teachers. A range of feasible alternative occupations and employment opportunities in these fields is examined. Some of the alternative job markets are also projected to have a labor oversupply. Two studies of employers' opinions of the merits of personnel trained at universities versus tertiary colleges indicate that it was commonly believed that technical and college graduates were more practical and of more immediate use to employers. Employers state that they desired more communication between the education system and business. A case study of the numerical strength and career performance of graduates in the Australian Public Service is also presented. Although the total number of diplomates in the second and third divisions has fallen in recent years, there has been an increase in diplomate recruitment. There appear to be openings for graduates in the specialist stream (as education officers) and in the general administrative stream. Diplomates have better career prospects than school leavers who join the Australian Public Service, but do not appear to be promoted as quickly as graduates. (SW)

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REPORT NUMBER 11
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SURVEY OF STUDENT SKILLS AND EMPLOYMENT OPPORTUNITIES

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RESEARCH COMMITTEE

HE 013511

NEDLANDS COLLEGE of Advanced Education

NEDLANDS COLLEGE OF ADVANCED EDUCATION

REPORT TO: RESEARCH COMMITTEE

FROM: R.W. McKENZIE,
SPECIAL PROJECTS OFFICER

SUBJECT: SURVEY OF STUDENT SKILLS
AND EMPLOYMENT OPPORTUNITIES

DATE: MARCH, 1980

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PREAMBLE

In common with the experience of almost all tertiary educational institutions in Australia, the college finds that a proportion of its diplomates cannot obtain jobs in their immediate area of specialisation, be it secondary teaching, recreational work or library media work. Furthermore (and again in common with almost all tertiary institutions), there are a proportion of students who cannot obtain jobs at diplomate levels in any field.

An established literature records the existence of these phenomena. For example, Karmel (1977) writes as follows:

"The rapid increase in the number of graduates in the workforce suggests that unemployment among graduates is likely to continue to rise, certainly as long as the general level of economic activity remains somewhat depressed....in the long run (say after 30 or 40 years) the number of persons in the workforce holding university and college degrees will be of the order of one million, i.e. about one-eighth of the workforce. Although this represents a very large increase over the present situation (about 250,000 degree holders) it represents a rate of growth of only some four percent per annum - a rate smaller than that of the past few years. There will also be a large number of diploma holders.

"The effect....will be to force degree (and diploma holders) to accept jobs lower and lower down the job hierarchy. Unless university and college students are conditioned to the limitations of the job market, there are likely to be many whose aspirations are gravely disappointed. However, it seems likely that graduates and diplomates will themselves obtain jobs, because, unlike experience in some European countries, Australians appear willing to accept jobs below the "status" that attaches to their formal qualifications. For the less well qualified, jobs will become all the more difficult to obtain.

".....While it is in the interest of the individual to obtain higher qualifications to improve or maintain his position in the job queue, society does not necessarily benefit when all individuals behave in this way. A major consequence....is to disadvantage particularly those at the end of the queue. Thus credentialism, which relates mainly to the better qualified, has its most serious consequences on the unqualified."

In looking at the graduate oversupply problem from the demand side of the equation, Berg (1970, pp 186, 187) writes as follows:

".....(the findings) give grounds for doubting that it is useful to regard education in America within a simplified framework in which a person's years of schooling are taken as a significant measure (of productive capacity).

"The tendency on the part of employers to raise educational requirements without careful assessment of their needs, in both the short and the long run, can benefit neither managers, nor the system they extol.

"This purposeless credential consciousness further handicaps education, especially higher education, in the pursuit of its promise to liberate people and to help preserve for society its better traditions and commitments."

Undesirable as these trends may be, there is little doubt that many of our graduates, in common with others, will have to search for jobs which are far removed from their traditional and intended destinations. The purpose of this paper is firstly, to establish the fact that in the short to medium term at least, the available employment indicators appear to make the adoption of different or reduced aspirations on the part of many tertiary-education people unavoidable; secondly, its purpose is to suggest what some of these alternative destinations might be for some of the College's diplomates, together with a supply and demand forecast where available; thirdly, details are presented as to how diplomates might expect to fare career-wise in a large organisation employing much skilled labour.

1.0. The Education, Library, Museum and Art Gallery Sector.

1.1. Recent History of the Sector.

Employment grew by 51.3 percent from 214,500 in January 1972, to 324,600 in January 1979. The growth rate over the period was 6.1 percent per annum. There was a strong seasonal trend with a drop in numbers employed of 11,000 over each Christmas period, females showing much smaller falls than males at the end of the year. Females constitute 59.8 percent of this sector and males constitute 40.2 percent.

The number of graduates obtaining employment in the education sector of the workforce grew strongly between 1974 and 1976 and now appears to be levelling off at about 19,000 per annum. The number of graduates finding difficulty in obtaining satisfactory employment (which is not an unemployment rate per se) grew from 1,000 in April 1974 to 5,450 in April 1978, and this trend is expected to continue.

The growth trend for employment in the education sector and the private sector 'turned over' fairly sharply in 1978. The number of Advanced College graduates seeking full time employment grew from about 660 in 1974 to 2,500 in 1978. This sharp increase reflects slower growth in government employment and in education.

During 1979, employment in this sector increased by about 4.2 percent in Western Australia, but showed slower growth in the other states, except South Australia, where there was a marginal fall.

1.2 Recent Fortunes of Education Graduates.

Growth in the supply of these graduates (or diplomates) has averaged 8.8 percent per annum on a very wide base during 1974-1979. The supply of college graduates peaked at 18,000 in 1976 and is expected to fall steadily.

In 1978, 72 percent of Advanced College graduates found employment in the education sector, with 8.7 percent going on to further study and 9.5 percent seeking full time employment. The details are shown in the table over the page.

New Graduates in Education:

Destination by Sector (as at April 1978 survey).

Destination	Universities		Advanced Colleges	
	%	Survey Number	%	Survey Number
Further Full Time Study	10.0	63	8.7	439
Government	4.0	25	2.2	111
Private	2.2	14	1.9	96
Education	67.3	422	71.6	3612
Seeking Full Time Employment	9.4	59	9.5	479

The type of work done by college graduates in education centres closely on employment in teaching/lecturing or educational administration, with only 4.5 percent spilling over into "all other work classifications".

Commonwealth Employment Service statistics show that registered unemployed teachers numbered 297 (April 1974), 2951 (April 1978) and 4,521 (February 1979).

1.3. Recent Fortunes of Library Technicians/Assistants

This occupation occurs mainly in the public sector. Employment has been affected by low growth in government spending on library facilities and library staff in recent years and demand has been largely on a replacement basis. In Western Australia, there has been little demand recently for library technicians and there has been a small oversupply of personnel.

2.0 The Entertainment and Recreation Services Sector

2.1. Recent History of the Sector

This sector (which subsumes a large matrix of industries from musical composition to betting shops) experienced strong employment growth during 1975 then fell until mid-1978 when employment was 3 percent lower than in 1975. However, in the year to November 1979, employment increased by about 5 percent.

2.2. Recent Fortunes of Recreation Workers

At the demand end of the market, two specialisations may be recognised. The minority specialisation is that of recreation "planner" or "officer", who will tend to have regional or even state-wide responsibilities. The majority specialisation is that of recreation "leader", who will tend to conduct activities for restricted population groups in a neighbourhood or centre setting.

The Australian recreation workforce appears to be well supplied with potential entrants, although there have been occasional shortages of highly qualified and skilled workers. In Western Australia, there has been a slight oversupply of qualified workers owing to the preference of some employers for more highly qualified personnel than could be provided in the local market.

3.0 PROGNOSIS

According to the Department of Employment and Youth Affairs (May 1979, p. 206) "...there is ample qualitative data indicating that the placement of graduates in non-graduate jobs is occurring". Therefore, in the Department's analyses, "...oversupply is defined in terms of graduates seeking full-time employment and the spill-over of graduates from traditional types of work done". This definition is also applicable with respect to this paper.

3.1 SECONDARY TEACHERS

Projections of supply and demand for secondary teachers in Australia indicate oversupply rising to very substantial levels by 1985, to perhaps 35,200 or 40 per cent of requirements. The source of this estimate is Teacher Supply and Demand in Australian Schools, 1978-85, a report of the Australian Education Council Working Party. Even if the states achieve 'improved standards' of staffing, an oversupply of 23,000 or 23 per cent of requirements is projected.

In Western Australia, the current position is in oversupply and, in the view of the D.E.Y.A., excess supply should continue to increase, especially if wastage continues to decrease and women remain in the workforce for longer periods.

Projections by the Western Australian Post Secondary Education Commission (1978) show oversupply continuing until 1983, in which year demand is expected to exceed supply. This situation is expected to persist until 1986, in which year the oversupply is expected to reappear.

In these estimates, however, "only a small proportion of the excess of supply over demand each year is accumulated within the supply estimates for the following years", which implies that the pool of teacher oversupply which is expected to build up before 1983 would be unlikely to be absorbed by the excess demand of 1983-85. In fact, a summation of WAPSEC'S annual estimates of divergencies of supply from demand (1979-88) shows an accumulated excess supply of about 500 teachers.

3.2 LIBRARY TECHNICIANS/ASSISTANTS

In Western Australia, whilst professional librarians remain in minor oversupply, the demand for technicians/assistants is forecast to balance the supply in the period to November 1981. The forecast is identical for all states.

3.3 RECREATION WORKERS

In all states except Victoria and Western Australia, the demand for this type of labour is forecast to balance supply in the period to November 1981. In Victoria, a minor shortage is anticipated, but in Western Australia, the outlook is for a minor oversupply during the forecast period.

As indicated earlier, employers in this State often appear to prefer persons with higher qualifications than those supplied by the local market. This led to the current position of minor oversupply. The recent provision by Nedlands College of courses beyond the U.G.3 level should produce graduates who more nearly match the wants of employers. However, these developments will not remove, and may exacerbate, the oversupply of holders of the two-year diploma (unless the graduates of higher level courses are drawn mainly from the ranks of the existing diploma holders).

4.0 Alternative Career Destinations for Nedland s Diplomates

The following is a list of occupations, compiled with the aid of the Commonwealth Employment Service Career Guide, which appear to be accessible to graduates of this College. "Accessibility" is gauged by both the requirements for entry into a particular field and by the extent to which the subject matter of our courses matches the skill requirements which an occupation appears to require.

Each reference lists the name of the occupation and the subject areas which appear relevant. Remarks culled from the career guide are shown in quotation marks. Where available, the D.E.Y.A. employment outlook is also quoted.

4.1. Advertising Account Executive. (English, Social Science, Communications, Business Education, Art) "Traditionally people joined (advertising agencies) in junior positions and established a wide range of experience . . . However, tertiary qualifications are becoming increasingly beneficial to advancement prospects . . . Many people enter from related fields that require contact and communication with the public".

4.2 Bank Officer. (Social Science (Economics) or any other major teaching field) "Whilst the majority of the banks' recruitment comes from secondary school leavers, graduates may join a bank at a suitable level in a specialised area, or pursue a career in general banking."

4.2.1. Outlook:
The banking industry in Western Australia is growing at a slower rate than growth in the total workforce. This has been the result of the impact of technology and increased competition. An increasing proportion of tertiary qualified personnel is being included in the number of new recruits. Employment is expected to increase by about 1.5 percent per annum in 1980/81, that is, by a similar rate as that of recent years.

4.3. Public Service: Assistant Research Officer or Clerk Class I (Commonwealth) or Graduate Trainee (State). (Most subject areas.) "Individuals holding an approved degree or three year diploma from a university or college of advanced education may apply to enter the clerical/administrative structure, often at a higher level . . ."

4.3.1. Outlook:
In the Commonwealth Public Service, graduates are able to sit the clerical selection test which is the basis for selection from school leavers. In the two years from May 1979, graduate recruitment was therefore expected to increase at the expense of those with lower level qualifications. Due to the imposition of staff ceilings in the state public services, employment in this sector was forecast to remain stable in the period to May 1981.

4.4. Display Personnel. (Art with English or Communications or Social Science minor.) "On-the-job training provides display personnel with the basic experience that is needed . . . Perth Technical College offers a four-year part-time course for their certificate of merchandising display . . . (these courses typically cover areas including English and Communications, Machinery and Equipment, Display Technology, Planning and Design, Economics and subjects involving applied Art."

4.5. Film and Television Producer. (Communications) "Persons wishing to become producers generally gain experience through on-the-job training at more junior production levels." Such persons could enrol in the Australian Film and Television School in this State and undertake appropriate units in tertiary institutions including Nedlands C.A.E.

4.6. Hospital Administration. (Most subject areas.) Entry would be at the lower levels of health administration with further training available on two different levels:

(1) Diploma of Hospital Administration course available part-time or externally from the Technical Education Division.

(2) Bachelor of Health Administration course, available externally from the University of New South Wales.

4.7. Journalist-Cadet. (English, Communications or Social Science) "Most appointments are made at Year 12 level, although graduates and under-graduates are occasionally appointed . . . some preference may be given to graduate or under-graduate applicants who have undertaken tertiary studies in economics or commerce or political science."

4.7.1. Outlook:
In Western Australia, financial constraints have reduced the annual cadet intake to about 20 cadetships per annum. However, an undersupply situation is evident at all levels of journalism, other than the most basic. The shortage was expected to become more acute in the two years to May 1981.

4.8. Market Research Worker. (Social Science or Mathematics) "Market research executives are usually university graduates in art, economics or commerce . . . including the study of psychology and statistics. There is a limited demand for . . . workers without experience."

4.9. Personnel Officer (English or Social Science.) "Personnel officers may obtain experience in a junior capacity or as a graduate . . . on the job training . . . is usually supplemented with attendance at short external courses or post-graduate tertiary courses."

4.9.1. Outlook:
A minor oversupply is anticipated in Western Australia in the period to November 1981.

4.10. Public Relations Officer. (English, Communications, Social Science) "Although training is usually given on the job, it is desirable to possess qualifications in journalism, economics or psychology. Tertiary qualifications or a period spent in business administration or radio and television work are recognised as suitable backgrounds for public relations positions."

4.11. Radio/Television Broadcaster. (English, Communications, Music or Social Science) "Training . . . is normally provided on the job, which may be supplemented by various courses (which) cover such areas as voice production, presentation, musical background, etc. Entry to the field of announcing is usually subject to auditions and interviews . . . a good command of the English language (is required) and (candidates) should read widely to keep abreast of current events and be familiar with the correct pronunciation of titles of musical compositions, names of artists, place names in all countries . . ."

4.11.1. Outlook:
Employment with the Australian Broadcasting Commission fell by about 16 percent betwen 1975 and 1979. The employment level is expected to remain fairly stable to May 1981. Commercial television stations have increased their employment levels over the last few years. Prospects are for employment levels to increase slowly to May 1981.

4.12. Ranger. (Science or Social Science) "...most rangers employed by the National Parks Board undertake a period of practical training at the Yanchep National Park. The minimum educational level required is completion of year eleven . . . Passes in such subjects as biology, geography, geology, mathematics, physics, chemistry and English would be an advantage."

4.13. Real Estate Salesperson. (Most subject areas.) "Entry into the occupation . . . is gained by employment in an estate agent's office as a salesperson, thereby gaining a sub-agent's licence. Completion of a diploma or certificate course . . . entitles a person to apply for a real estate agent's licence."

4.13.1. Outlook:
There is insignificant demand in Western Australia for inexperienced personnel. There is a high level of demand for those salespersons with long-term experience. If the industry should recover, the demand for inexperienced staff will move towards balance.

4.14. Secretary. (Business Education) Requires typing, clerical, reception and sometimes shorthand skills.

4.14.1. Outlook with reference to the introduction of word processors: The D.E.Y.A. expects that the average displacement ratio which should occur is that 2.5 to 3 typist/secretary positions will be replaced by one word processing operator or administrative secretary. The Department's enquiry found, however, that no contact stated that the introduction of word processing had led to retrenchments, rather natural wastage and staff transfers had occurred . For New South Wales and the Australian Capital Territory, the estimated number of positions to be lost between January 1978 and December 1981 amounts to 4 to 7 percent of the estimated mid-1978 total of typists/secretaries; viz from 4,350 to 7,400 positions.

It is not a foregone conclusion that this estimated loss will lend to a contraction in the total demand for secretaries/typists/word processing operators/administrative secretaries. Relevant factors which impinge are the general level of business activity, the cost of labour relative to that of the new equipment and rates of natural wastage. It is expected that new types of occupations related to word processing will be created and will partially offset the loss of typist/secretary positions.

The outlook to November 1981 is for an oversupply of semi-skilled workers concurrent with a minor shortage of qualified workers in Western Australia and all other states.

4.15. Welfare Worker or Group Worker. (All teaching courses.) "Preference is given to applicants who are over 21 years of age and who are assessed as suitable for welfare work. Training courses are available at various levels at tertiary institutions."

4.15.1. Outlook:
In Western Australia, the cut-back in government expenditure has restricted social welfare growth and new employment opportunities will be limited. Welfare workers are experiencing severe competition from social workers. Because of the addition of such other personnel, a minor oversupply will exist to November 1981.

4.16. Youth Worker. (All teaching and recreation courses.) "Degrees obtained in Human Movement Studies, Psychology, Sociology or Physical Education may . . . assist in obtaining positions. A number of organisations conduct in-service training courses . . . employers usually accept applicants of around nineteen . . . experience gained by working on a voluntary basis is an added advantage.

5.0 Employers' Opinions of College Graduates (Diplomates)

5.1. Anderson (1978) conducted a survey of 224 employer organisations, 138 of whom employed university graduates at the time they replied (late 1977) and 86 who did not.

The total number of tertiary graduates employed by the respondents was 4,642 and the split-up by type of tertiary institution and sex was as follows:

Graduates by Sex and Type

		Males	Females	Totals
University of W.A.		1,653	345	1,998
	%	(35.6)	(7.4)	(43.0)
Other Universities		940	264	1,204
	%	(20.3)	(5.7)	(26.0)
Non-Universities		1,037	403	1,440
	%	(22.3)	(8.7)	(31.0)
Totals:		3,630	1,012	4,642
	%	(78.2)	(21.8)	(100.0)

A finding of this research was that "....university graduates were considered to be better academically, of higher quality and more valuable in the long run, but college graduates were said to be more practical, have better job orientation and be more immediately useful. Several respondents doubted that there were any significant differences.

"The majority of employer organisations said that the university should give more emphasis to career and vocational training and mentioned the need for a more practical (applied) approach in the final year of university courses."

About half the respondents required previous experience and about half did not.

Respondents were asked to nominate the minimum qualification they sought in Professional staff: 7.2 percent of responses opted for non-degree tertiary qualifications. However, when asked to nominate what alternative qualifications they would accept, 28.4 percent of responses opted for "any degree or diploma judged strictly on merit".

In relation to responses in this category, Anderson notes that "....in a number of cases, it was specified that the alternative qualification should be in a related or cognate relevant discipline, where more specialised job categories are concerned.

"In the strictly professional areas of medical/dental and legal, there either (was) no alternative or the alternative was virtually the same. In the .... areas of management, administration, production and distribution, and finance, a wide range of alternatives was acceptable...."

A table of acceptable alternative qualifications nominated by respondents is annexed to this report as Table Four.

5.2. A somewhat similar piece of research was carried out, by John P. Young and Associates (July 1976), although its aim was to find out employers' attitudes to the products of the education system as a whole, not just the products of universities or tertiary colleges.

A total of 200 interviews was carried out, comprising respondents from Sydney, Melbourne, Adelaide, Brisbane, Perth and Newcastle. Four business classifications were more or less equally represented: manufacturing; retailing; banking, finance and insurance; other service industries.

The report noted similar attitudes to the relative merits of university and non-university graduates as those recorded in Anderson's survey.

For example, question 20 asked:

Do you find there is any difference between graduates of the universities and graduates of the institutes of technology? The replies were as follows:

	Number	%
Yes	108	54
No difference	19	10
Don't know/no opinion	73	36
	200	100
Tech. graduates are more practical	68	34
Tech. graduates better at first but uni. grads. better in the long run.	9	4
Uni. grads. are better	7	3
Both have their uses.	6	3
No reasons given.	18	9

Questions 18/19 asked:

Do you find there are particular problems with people who have a university degree? If so, which problems? The replies were as follows:

	Number	%
Yes	138	69
No	36	18
Don't know/no opinion	26	13
	200	100

Analysis of YES answers:

Too theoretical/not practical enough	70	35
Expectations too high.	48	24
They know it all.	12	6
Other answers.	15	8

Question 26 asked:

What changes would you like to see in education to make the people it turns out more acceptable to business?

	Number	%
More communication between education system & business	53	27
More practical approach and experience for students	48	24
More emphasis on basic skills (reading, writing, speaking, spelling, arithmetic).	45	22
Better attitudes to work and discipline.	16	8
Better career guidance	10	5
More business subjects	8	4
Better attitudes to business	6	3
No changes	8	4

On the basis of the results of these two surveys, it would seem that one advantage which Nedlands diplomates initially have over university graduates, is that employers regard the products of advanced colleges as more practical and more immediately useful.

More than one quarter of employers sampled wanted more communication between the education system and business. If the College endeavoured to open up more channels of communication with business, there might be a significant spin-off in terms of widened job opportunities for its diplomates. This could occur merely by virtue of employers having increased knowledge of the skills possessed by Nedlands diplomates. It need not necessarily involve making large changes in the College's courses.

6.0 How Diplomates' Career Progression Compares With Persons Holding Other Qualifications In The Australian Public Service

The Australian Public Service is a major employer of qualified personnel. In order to assist the College's research, the Public Service compiled the attached data which segregates persons with a degree (pass, honours, masters or doctorate) from diploma holders, and from holders of 'other' qualifications (presumably mainly secondary school qualifications). In every case, an employee is classified by the highest qualification he possesses, i.e. she/he may have entered the service with a diploma, but later acquired a degree, thereby being no longer classified as a diploma holder. To the extent to which this upgrading has occurred, these figures would understate the number of diploma holders at each level. It would require a further cohort study to see whether entry with a diploma and subsequent acquisition of a degree gives an employee a better chance of promotion than entry with a diploma and non-acquisition of a degree.

Table 1 shows the highest educational qualification of people newly recruited into the third division in the period 1975-78. In the administrative stream, diploma holders recorded an increase from 2.1 percent to 3.2 percent of new appointments over the review period; an unspectacular increase, having regard to the very small 1975 base. However, in the specialist stream, the percentage of diplomates recruited rose from 1.4 to 12.3. Although the absolute number (150) recruited in 1978 was not large, there would appear to be some scope for Nedlands' diplomates to be appointed as education officers in addition to the possibility of recruitment to the administrative stream.

Table 2 shows the career progress that has been made by graduates, diplomates and 'others' who joined the third division in 1975. A meaningful comparison between the groups is made difficult because of the small number of diplomates as opposed to the size of the remainder of the population (44 compared to 3,058).

Bearing in mind this strong reservation, it is noted that one graduate (or 0.3 percent of the central office graduate intake) managed to reach the coveted second division (senior administrated level) in the review period. By contrast, no diplomate rose beyond Class 7, which was achieved by one such person at a central office. Eleven officers with 'other' qualifications went further, reaching classes 8 or 9 at a central or branch office.

Treating central and branch office figures as an entity, Table 2 indicates that at least half the recruits with 'other' qualifications reached class 2/3 or higher while at least half the diplomates had reached class 4 or higher. However, at least half the university graduates in this study had reached class 6 or higher.

The data therefore, tends to indicate that in the Australian Public Service, people progress faster or slower depending upon the level of qualifications held: diplomates make slower progress than graduates, but faster progress than those with school leaving qualifications. This conclusion must be tempered with the reminder that the diplomate group is numerically very small in the data in Table 2 and that some employees who entered with diplomas may have subsequently acquired degrees.

Table 3 shows first, second and third division officers by highest educational qualifications during 1975-78. An interesting finding is that no diplomate occupied a first division post (permanent head of deparment) during the review period, whereas, between two and five persons with 'other' qualifications did. Graduates heavily predominated, of course.

The Table also shows a steady fall in both the absolute number of diploma holders employed in the second and third divisions and a drop in their percentage representation in these divisions over the review period. This drop occurred despite the increase in diplomates recruited during the period (vide Table 1) and indicates that significant numbers of employees with this type of qualification must be retiring or resigning.

7.0 Conclusions

An oversupply situation clearly exists in the segments of the labour market which Nedlands College diplomates in teaching, library media and recreation would regard as their normal destinations. This oversupply will continue for at least two years in the case of library and recreation diplomates, and is forecast to worsen and persist for longer periods in the case of secondary teachers.

The consequence of these developments is that many of our diplomates, in common with graduates from most other tertiary educational institutions, will be compelled to seek employment outside their traditional areas of specialisation. This paper has presented a range of feasible alternative destinations, together with an employment outlook for each of these occupations, where a forecast was available. Some, but by no means all, of the alternative job markets were forecast to also have an oversupply of labour.

Two studies were reported, in which employers gave their opinions of the relative merits of personnel trained at universities on the one hand, and at tertiary colleges on the other. The common conclusion was that technical and college graduates were more practical and of more immediate use to employers. The prevalence of this view should assist our diplomates in getting a toe-hold on the careers ladder in the first year or two after graduation. Employers stated that they desired more communication between the education system and business. Pursuit of this objective by the College could increase the number of career openings for its diplomates.

Finally, a case study of the numerical strength and career performance of diplomates in the Australian Public Service was presented. Although the total numbers of diplomates in the second and third divisions has fallen in recent years, there has been an increase in diplomate recruitment, whether measured numerically or in terms of percentage of overall intake. There would appear to be openings for our diplomates in the specialist stream (as education officers) and in the general administrative stream.

Diplomates have better career prospects than school leavers who join the Australian Public Service, but do not appear to be promoted as quickly as graduates, or to reach final positions as senior as those achieved by graduates. The small number of diplomates in the cohort study necessitates caution in accepting these conclusions as final and binding.

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WESTERN AUSTRALIAN POST-SECONDARY EDUCATION COMMISSION : The Supply of and Demand for Teachers in Western Australia, 1979-1988, WAPSEC, Perth, 1978.

Table 1 Third Division Appointment by highest Educational Qualifications 1975-1978.

		1975		1976		1977		1978	
		Admin.	Spec.	Admin.	Spec.	Admin.	Spec.	Admin.	Spec.
University degree or higher	No	1054	694	458	486	1395	587	1789	707
	%	14.9	49.4	18.2	35.9	25.5	58.8	34.6	58.0
Diploma	No	150	20	72	156	154	133	167	150
	%	2.1	1.4	2.9	11.5	2.8	13.3	3.2	12.3
Other	No	5858	691	1981	710	3291	278	3215	362
	%	830	49.2	78.9	52.5	71.7	27.9	62.2	29.7

Definitions:

Admin.: Third Division Clerical/Administrative structure, including Computer Systems Officers (programmers), Accountants, Economists etc.

Spec.: Third Division Specialist structures, including Engineers, Psychologists, Scientists, Social Workers, Technical Officers, Education Officers etc.

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Table 2: 1975 Third Division Clerical/Administrative base grade intake - Level as at 31 Dec. 1978

	Central Office				Branch Office			
Class	Degree	Diploma	Other	Tota	Degree	Diploma	Other	Total
Number remaining	342	10	527	879	142	34	2047	2223
	%	%	%	%	%	%	%	%
1	9.6	10.0	13.3	11.8	15.5	23.5	28.6	27.7
2/3	2.3	20.0	33.4	21.2	14.1	26.5	43.0	40.9
4	4.1	10.0	29.4	19.3	26.8	11.8	22.9	22.9
5	15.2	20.0	9.1	11.6	22.5	20.6	4.5	5.9
6	32.7	30.0	10.6	19.5	15.5	17.6	0.7	1.9
7	17.8	10.0	2.5	8.5	4.9	..	0.2	0.5
8	12.3	..	1.5	5.7	0.7	..	0.1	0.1
9	4.4	..	0.2	1.8	..	..	..	..
10	0.6	..	..	0.2	..	..	..	..
11	0.6	..	..	0.2	..	..	..	..
Second Division	0.3	..	..	0.1	..	..	..	..

Educational Qualifications relate to the highest qualification held at 31 Dec 1978, regardless of whether this was held at the time of appointment. Degree includes higher qualifications.

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Table 3: First, Second & Third Division Officers by Highest Educational Qualifications 1975-78.

		1975			1976			1977			1978		
		First	Second	Third	First	Second	Third	First	Second	Third	First	Second	Third
University degree or higher	No	29	894	13048	26	872	13119	26	921	13890	27	962	15781
	%	85.3	72.9	22.0	86.7	72.6	22.2	92.9	74.6	22.9	90.0	75.6	25.5
Diploma	No	..	164	5573	..	152	5530	..	153	5288	..	154	5141
	%	..	13.4	9.4	..	12.7	9.4	..	12.4	8.7	..	12.1	8.3
Other	No	5	169	40674	4	177	40393	2	159	41606	3	157	40961
	%	14.7	13.8	68.6	13.3	14.7	68.4	7.1	12.9	68.4	10.0	12.3	66.2

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TABLE 4

OTHER ACCEPTABLE QUALIFICATIONS

RESPONSES	JOB CATEGORIES													N	%
	1	2	3	4	5	6	7	8	9	10	11	12	13		
Number of Category Respondents	25	35	36	24	13	12	24	19	9	44	20	16	19	296	73.6
No others acceptable	4	3	7	10	13	3	5	4	9	23	5	2	4	92	31.1
Any degree or diploma judged strictly on merit	10	13	10	5		1	7	8		13	10	1	6	84	28.4
Commerce, economics, business degree	9	9	8	13		1		1				3	1	45	15.2
Other tertiary (non degree) qualifications	1	14	6	1		2	2			6	4		3	39	13.2
Science degree	1	4	7	1			8	1		3	2	5	2	34	11.5
Any general degree with appropriate units	5	2	6	3			2	1				3	3	25	8.4
Higher degree, post graduate qualifications or experience	1	3	3	2		2	6	5						22	7.4
Engineering degree	5	3	2	1							2	3	4	20	6.8
Other professional degree	1		1			4						1	1	8	2.7
Unclassified	3	10	6	2		2	3	2		6		2		36	
Total Responses	40	61	56	38	13	15	33	22	9	51	23	20	24	405	

Key to Job Categories

1 Management
2 Administration
3 Production/distribution
4 Finance
5 Medical/dental
6 Paramedical
7 Scientific Officers
8 Education
9 Legal
10 Engineering
11 Chemists
12 Data Processing
13 Miscellaneous